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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,494	11/19/2001	Alex P. Weaver	WEAVER.PT1	5181

24943 7590 03/18/2004

INTELLECTUAL PROPERTY LAW GROUP LLP  
12 SOUTH FIRST STREET  
SUITE 1205  
SAN JOSE, CA 95113

EXAMINER:

GARCIA, ERNESTO

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 03/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/997,494

Applicant(s)

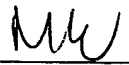
WEAVER, ALEX P.

Examiner

Ernesto Garcia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 5-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 5-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

The drawing was received on 1/20/04. This drawing is acceptable.

### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 9-20 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility. Claim 9 recites, "one or more of the joints support a tabletop" in line 24 and claim 15 recites "a tabletop is supported and stabilized only by the one or more joints (two or more joints), which makes impossible for the tabletop to be supported with one or two joints. For the tabletop to be supported, at least three joints are required to support the tabletop. Therefore, one joint or two joints makes the tabletop inoperative as the tabletop cannot be supported and stabilized otherwise the is a by less than three legs; at least three joints are required; It is a legs; only legs;".

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scarlett, 2,486,987 (see marked-up attachment), in view of Grisley, 5,711,356.

Regarding claim 1, Scarlett discloses, in Figures 5 and 8, a double locking mortise joint comprising a first member **12** and a second member **31**. The first member **12** has a first mortise **18**, a first contact surface **A7**, and a second contact surface **A8**. The first mortise **18** is generally perpendicularly with respect to an axis **A3** of the first member **12**. The first mortise **18** has a gusset top **A4**, a head bottom **A5** and a first mortise end **A6**. The gusset top **A4** extends generally perpendicularly outwardly with respect to the axis **A3**. The head bottom **A5** is opposite to and generally parallel to the gusset top **A4**. The head bottom **A5** is shorter in length than the gusset top **A4**. The first mortise end **A6** is generally parallel to the axis **A3** and connects the gusset top **A4** and the head bottom **A5**. The second contact surface **A8** is next to the first mortise end **A6**. The first contact surface **A7** and the second contact surface **A8** are next to the first mortise end **A6**.

The second member **31** has a second mortise **32**, a top surface **A13**, and a bottom surface **A14**. The second mortise **32** has two opposing sides **A11** being generally parallel to each other. The second mortise end **A12** connects the opposing

sides **A11**. The top surface **A13** and the bottom surface **A14** are next to the second mortise end **A12**. The first member **12** and the second member **31** are rigidly and snugly yet removably joined together at the first mortise **18** and the second mortise **32** by fitting the gusset top **A4** and the head bottom **A5** between the opposing sides **A11** of the second mortise **32**. The head bottom **A5** extends onto the top surface **A13**. The gusset top **A4** extends onto the bottom surface **A14**. The opposing sides **A11** extend onto the first contact surface **A7** and the second contact surface **A8**.

The first mortise further comprises a first mortise corner **A15** and a second mortise corner **A16**. The first mortise corner **A15** is located between the first mortise end **A6** and the head bottom **A5**. The second mortise corner **A16** is located between the first mortise end **A6** and the gusset top **A4**. However, at least one of the two mortise corners is not rounded. Grisley teaches between Figures 9b and 9c at least one of two mortise corners being rounded as part of a design choice. Therefore, as taught by Grisley, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make at least one of the two mortise corners being rounded instead of being square-edged.

Regarding claim 5, Grisley teaches both of the two mortise corners are rounded (Fig. 9c).

Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scarlett, 2,486,987 (see marked-up attachment), in view of Grisley, 5,711,356, and further in view of Sheperdson, 1,419,647, and Blake et al., 2,000,915.

Regarding claim 6, Scarlett, as discussed above, fails to disclose the first member **12** being a table leg; and, the second member **31** being a corner of a tabletop. Sheperdson teaches uses of applicant's joint to make chairs, settees, lounges, bedsteads, bureaus, cabinets or tables (col. 1, lines 17-23). Therefore, one of ordinary skill in furniture construction will use the joint in a table such that the first member is the leg of the table and the second member is the tabletop. However, Sheperdson fails to disclose the second member being the corner of the tabletop. Blake teaches a second member being a corner of a tabletop 10 as part of a design choice instead of choosing a portion between corners of the tabletop to support the tabletop. Therefore, as taught by Shepherdson and Blake, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the first member be a table leg and the second member be a corner of a tabletop as part of a design choice to support the tabletop.

Regarding claim 7, Scarlett teaches the first member further comprises an inner side and an outer side. The inner side is substantially parallel to the outer side.

Regarding claim 8, the inner side and the outer side have a same curvature.

Applicant is reminded that the curvature is zero degrees.

Claims 9, 12-15 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scarlett, 2,486,987 (see marked-up attachment), in view of Sheperdson, 1,419,647, and Langue, D429,096.

Regarding claim 9, Scarlett discloses, in Figures 5 and 8, a double locking mortise joint comprising one or more leg **12** and an edge **31**. The leg **12** has a first mortise **18**, a first contact surface **A7**, and a second contact surface **A8**. The first mortise **18** is generally perpendicularly with respect to an axis **A3** of the leg **12**. The first mortise **18** has a gusset top **A4**, a head bottom **A5** and a first mortise end **A6**. The gusset top **A4** extends generally perpendicularly outwardly with respect to the axis **A3**. The head bottom **A5** is opposite to and generally parallel to the gusset top **A4**. The head bottom **A5** is shorter in length than the gusset top **A4**. The first mortise end **A6** is generally parallel to the axis **A3** and connects the gusset top **A4** and the head bottom **A5**. The second contact surface **A8** is next to the first mortise end **A6**. The first contact surface **A7** and the second contact surface **A8** are next to the first mortise end **A6**.

The edge **31** has a second mortise **32**, a top surface **A13**, and a bottom surface **A14**. The second mortise **32** has two opposing sides **A11** being generally parallel to each other. The second mortise end **A12** connects the opposing sides **A11**. The top

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surface **A13** and the bottom surface **A14** are next to the second mortise end **A12**. The leg **12** and the edge **31** are rigidly and snugly yet removably joined together at the first mortise **18** and the second mortise **32** by fitting the gusset top **A4** and the head bottom **A5** between the opposing sides **A11** of the second mortise **32**. The head bottom **A5** extends onto the top surface **A13**. The gusset top **A4** extends onto the bottom surface **A14**. The opposing sides **A11** extend onto the first contact surface **A7** and the second contact surface **A8**. However, Scarlett fails to disclose the leg being a table leg or the edge being a tabletop edge. Sheperdson teaches uses of applicant's joint to make chairs, settees, lounges, bedsteads, bureaus, cabinets or tables (col. 1, lines 17-23). Therefore, one of ordinary skill in furniture construction will use the joint in a table such that the leg is the leg of a table and the edge is the edge of a tabletop.

Given the joint used in the table as suggested by Sheperdson, the one joint will support a tabletop without any further supporting structural members or pieces existing below a horizontal plane, which lies at the joining of the first mortise and the second mortise (see Langué, Figure 1).

Regarding claims 12 and 18, the leg **12** has a height longer than both a width and a depth of the leg **12** combined.



Regarding claims 13 and 19, each of the table legs further comprises an inner side and an outer side. The inner side and the outer side are substantially parallel to each other.

Regarding claims 14 and 20, the inner side and the outer side have a same curvature. Applicant is reminded that the curvature is zero degrees.

Regarding claim 15, Scarlett discloses, in Figures 5 and 8, a double locking mortise joint comprising one leg **12** and an edge **31**. The leg **12** has a first mortise **18**, a first contact surface **A7**, and a second contact surface **A8**. The first mortise **18** is generally perpendicularly with respect to an axis **A3** of the leg **12**. The first mortise **18** has a gusset top **A4**, a head bottom **A5** and a first mortise end **A6**. The gusset top **A4** extends generally perpendicularly outward with respect to the axis **A3**. The head bottom **A5** is opposite to and generally parallel to the gusset top **A4**. The head bottom **A5** is shorter in length than the gusset top **A4**. The first mortise end **A6** is generally parallel to the axis **A3** and connects the gusset top **A4** and the head bottom **A5**. The second contact surface **A8** is next to the first mortise end **A6**. The first contact surface **A7** and the second contact surface **A8** are next to the first mortise end **A6**.

The edge **31** has a second mortise **32**, a top surface **A13**, and a bottom surface **A14**. The second mortise **32** has two opposing sides **A11** being generally parallel to each other. The second mortise end **A12** connects the opposing sides **A11**. The top

surface **A13** and the bottom surface **A14** are next to the second mortise end **A12**. The leg **12** and the edge **31** are rigidly and snugly yet removably joined together at the first mortise **18** and the second mortise **32** by fitting the gusset top **A4** and the head bottom **A5** between the opposing sides **A11** of the second mortise **32**. The head bottom **A5** extends onto the top surface **A13**. The gusset top **A4** extends onto the bottom surface **A14**. The opposing sides **A11** extend onto the first contact surface **A7** and the second contact surface **A8**.

Claims 10, 11, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scarlett, 2,486,987 (see marked-up attachment), in view of Sheperdson, 1,419,647, and Langue, D429,096, and further in view of Grisley, 5,711,356.

Regarding claims 10 and 16, the first mortise **18** further comprises a first mortise corner **A15** and a second mortise corner **A16**. The first mortise corner **A15** is located between the first mortise end **A6** and the head bottom **A5**. The second mortise corner **A16** is located between the first mortise end **A6** and the gusset top **A4**, and at least one of the two mortise corners is not rounded. Grisley teaches between Figures 9b and 9c at least one of two mortise corners is rounded as part of a design choice. Therefore, as taught by Grisley, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make at least one of the two mortise corners being rounded instead of being square-edged.

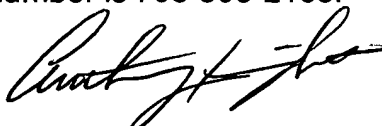
Regarding claims 11 and 17, Grisley teaches both of the two mortise corners are rounded (Fig. 9c).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1 and 5-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 703-308-8606. The examiner can normally be reached from 8:30-5:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on 703-308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2168.



**Anthony Knight**  
**Supervisory Patent Examiner**  
**Group 3600**

**Lynne H. Browne**  
**Supervisory Patent Examiner**  
**Technology Center 3600**

E.G.

March 5, 2004

Attachment: one marked-up copy of Scarlett, 2,486,987.

2,486,987

